

CLAIMS

1. Glazing which incorporates at least one electrically controllable system having variable optical and/or energy properties, especially in the form of a system comprising one or more reversible-insertion materials of the electrochromic-system (3) or gasochromic-system type, in the form of an optical-valve or viologen-based system or in the form of a liquid-crystal or cholesteric-gel system, **characterized in that** it also includes at least one means for adjusting the optical appearance conferred on the said glazing by the said system, these means comprising at least one coating (12) having antireflection properties in the visible.
2. Glazing according to Claim 1, **characterized in that** the coating (12) having antireflection properties is deposited on at least one of its external faces and comprises a stack of thin layers having alternately high and low refractive indices or a graded-refractive-index layer.
3. Glazing according to either of the previous claims, **characterized in that** the coating (12) having antireflection properties also has antistatic properties, by including a stack of thin layers at least one of which is made of an electrically conductive material of the doped-metal-oxide or conductive-polymer type.
4. Glazing according to one of the preceding claims, **characterized in that** it also includes a means for adjusting the optical appearance conferred on the said glazing by the said system, comprising at least one coating (11) for attenuating/modifying the colour of the glazing in reflection.
5. Glazing according to Claim 4, **characterized in that** the coating (11) for attenuating/modifying the colour of the glazing in reflection is in contact with the electrically controllable system, in the form of a thin layer having a refractive index intermediate

between those of the materials with which it is in contact on each of its faces.

6. Glazing according to Claim 4 or Claim 5, **characterized in that** the coating (11) for  
5 attenuating/modifying the colour of the glazing in reflection includes a thin layer having a refractive index of between 1.6 and 1.9, especially one based on aluminium oxide  $\text{Al}_2\text{O}_3$ , on yttrium oxide  $\text{Y}_2\text{O}_3$ , on silicon oxycarbide and/or oxynitride  $\text{SiOC}$ ,  $\text{SiON}$ , or on a  
10 mixture of at least two of these materials, or at least two superposed thin layers whose average refractive index is between 1.6 and 1.9, especially an  $\text{SnO}_2/\text{SiO}_2$  or  $\text{SnO}_2/\text{SiO}_2/\text{SnO}_2$  stack.
7. Glazing according to one of the preceding  
15 claims, **characterized in that** it includes a primer/tie-layer coating for the electrically controllable system (3) with respect to its carrier substrate (2), especially when the latter is a polymeric/plastic material.
- 20 8. Glazing according to one of the preceding claims, **characterized in that** it also includes a coating having hydrophilic/antimisting properties or having hydrophobic/anti-rain properties on at least one of its external faces.
- 25 9. Glazing according to Claim 8, **characterized in that** the coating having hydrophobic properties includes at least one layer consisting of a composition having at least one fluoroalkoxysilane, the alkoxy functional groups of which are directly linked to the silicon  
30 atom, a system of one or more aqueous solvents and at least one catalyst chosen from an acid and/or a Brönsted base.
10. Glazing according to one of the preceding  
35 claims, **characterized in that** it also includes a coating having photocatalytic/antifouling properties, comprising especially  $\text{TiO}_2$  at least partially crystallized in the anatase form, especially on at least one of its external faces.

11. Glazing according to one of the preceding claims, **characterized in that** it also includes at least one coating having electromagnetic screening properties.
- 5 12. Glazing according to one of the preceding claims, **characterized in that** the electrically controllable system (3) is a superposition of functional layers placed between two carrier substrates (1, 2), each of the said substrates possibly being
- 10 rigid, semi-rigid or flexible.
13. Glazing according to Claim 12, **characterized in that** the electrically controllable system (3) uses, as carrier substrate, at least one of the rigid substrates (2) of which the glazing is composed, and/or at least
- 15 one flexible carrier substrate (13) associated, by lamination, with one of the rigid substrates (1) of which the said glazing is composed.
14. Glazing according to one of Claims 1 to 11, **characterized in that** the electrically controllable
- 20 system (3) is a superposition of functional layers placed on a carrier substrate (2) and provided with a protective film of the inorganic or polymeric layer type, especially in the form of a lacquer or of a varnish.
- 25 15. Use of the glazing according to one of the preceding claims as glazing for buildings, especially an exterior window or a window for an internal partition or glazed door, as glazing with which the internal partitions or windows of transportation means
- 30 of the train, plane, car or boat type are equipped, as glazing for a display screen of the computer- or television-screen type, for spectacles or camera lenses or as protection for solar panels.